

This listing of claims will replace all prior versions
and listings of claims in the application:

Listing of Claims:

-29-(Currently amended)

A method for producing an antibody against a
Sarcocystis neurona antigen selected from the group
consisting of a 16 ~~(+/-4)~~ (+/-4) kDa antigen and a 30 ~~(+/-4)~~
(+/-4) kDa antigen, as determined by SDS polyacrylamide
5 gel electrophoresis, comprising:

(a) providing a *Sarcocystis neurona* antigen
selected from the group consisting of the 16 ~~(+/-4)~~ (+/-4)
kDa antigen and the 30 ~~(+/-4)~~ (+/-4) kDa antigen;

(b) admixing the antigen with an adjuvant to
10 produce an admixture;

(c) immunizing a mammal with the admixture to
produce antibodies against antigen; and

(d) removing serum from the immunized mammal
and isolating from the serum the antibody against the
15 *Sarcocystis neurona* antigen selected from the group
consisting of the ~~(+/-4)~~ (+/-4) 16 kDa antigen and the
~~(+/-4)~~ (+/-4) 30 kDa antigen.

-30- (Currently amended)

A method for producing a monoclonal antibody against a *Sarcocystis neurona* antigen selected from the group consisting of a 16 ~~(+/-4)~~ (+/-4) kDa antigen and a 30 ~~(+/-4)~~ (+/-4) kDa antigen, as determined by SDS
5 polyacrylamide gel electrophoresis, comprising:

(a) providing a microorganism containing a DNA encoding a fusion polypeptide in which a *Sarcocystis neurona* antigen selected from the group consisting of the 16 ~~(+/-4)~~ (+/-4) kDa antigen and the 30 ~~(+/-4)~~ (+/-4)
10 kDa antigen;

(b) admixing the antigen with an adjuvant to produce an admixture;

(c) inoculating mice with the admixture to produce antibodies against antigen;

15 (d) removing the spleens from the mice which produce the antibodies against the antigen;

(e) removing spleen cells from the spleens and mixing the spleen cells from the spleens with mouse myeloma cells to produce a mixture of fused cells
20 consisting of spleen cells fused to myeloma cells, the spleen cells, and the myeloma cells;

(f) selecting the fused cells on cell culture medium in which the fused cells can grow but in which

MSU 4.1-528
Appl. No. 09/669,833
August 7, 2003
Reply to Office Action of July 15, 2003

the spleen cells and the myeloma cells cannot grow; and

25 (g) screening the fused cells for fused cells
which produce the monoclonal antibody against the
Sarcocystis neurona antigen selected from the group
consisting of the 16 ~~(+4)~~ (+/-4) kDa antigen and the 30
~~(+4)~~ (+/-4) kDa antigen to produce the monoclonal
30 antibody.

Claims 32-35 (Cancelled)